IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A region data describing method for describing, over a plurality of frames, region data about a region of an arbitrary object existing in a video, the region data describing method comprising:

extracting position data of a representative point of <u>one of predetermined</u> ~~an~~ approximate ~~figure~~ <u>figures</u> approximating the region ~~or a characteristic point of the region~~ from the plurality of frames;

approximating a temporal trajectory of corresponding representative points ~~or corresponding characteristic points~~ of successive frames with <u>one of predetermined functions</u> ~~a predetermined function~~ of time~~, a coefficient of the function being represented by a parameter~~; and

describing <u>a first identifier indicating a figure type of the one of the predetermined approximate figures and a second identifier indicating a function type of the one of the predetermined functions</u> ~~the parameter of the function~~ as the region data.

Claim 2 (Original): The region data describing method according to claim 1, further comprising describing information specifying a leading frame or a trailing frame of said plurality of frames as the region data.

Claim 3 (Canceled).

Claim 4 (Currently Amended): The region data describing method according to claim 2, further comprising describing information of the number of ~~the~~ approximate ~~figure~~ <u>figures</u> <u>forming the region of an arbitrary object</u> as the region data.

Claim 5 (Previously Presented): The region data describing method according to claim 1, further comprising:

describing position data of knots of the trajectory and information specifying the trajectory used together with position data of the knots of the trajectory.

Claim 6 (Currently Amended): The region data describing method according to claim 1, wherein

a plurality of the representative points ~~or the characteristic points~~ are included in a certain frame, and

the region data includes information specifying correspondence among a plurality of said representative points ~~or characteristic points~~ in the certain frame and a plurality of said representative points ~~or characteristic points~~ in an adjacent frame.

Claim 7 (Original): The region data describing method according to claim 1, further comprising describing related information related to the object or information indicating a method of accessing to the related information.

Claim 8 (Currently Amended): A region data generating apparatus for generating region data about a region of an arbitrary object existing in a plurality of frames of a video, the region data generating apparatus comprising:

an extracting circuit configured to extract position data of a representative point of <u>one of predetermined</u> ~~an~~ approximate ~~figure~~ <u>figures</u> approximating the region ~~or a characteristic point of the region~~ from the plurality of frames;

an approximating circuit configured to approximate a temporal trajectory of corresponding representative points ~~or corresponding characteristic points~~ of successive frames with <u>one of predetermined functions</u> ~~a function~~ of time, ~~a coefficient of the function being represented by a parameter~~; and

a describing circuit configured to describe <u>a first identifier indicating a figure type of the one of the predetermined approximate figures and a second identifier indicating a function type of the one of the predetermined functions</u> ~~the parameter of the function~~ as the region data.

Claim 9 (Original): The region data generating apparatus according to claim 8, wherein said describing circuit describes information specifying a leading frame or a trailing frame of said plurality of frames.

Claim 10 (Canceled).

Claim 11 (Currently Amended): The region data generating apparatus according to claim 9, wherein said describing circuit describes information of the number of ~~the~~ approximate ~~figure~~ <u>figures forming the region of an arbitrary object as the region data</u>.

Claim 12 (Previously Presented): The region data generating apparatus according to claim 8, wherein the describing circuit further describes position data of knots of the trajectory and information specifying the trajectory and used together with position data of the knots of the trajectory.

Claim 13 (Currently Amended): The region data generating apparatus according to claim 8, wherein

a plurality of the representative points ~~or the characteristic points~~ are included in a certain frame, and

the region data includes information specifying correspondence among a plurality of said representative points ~~or characteristic points~~ in the certain frame and a plurality of said representative points ~~or characteristic points~~ in an adjacent frame.

Claim 14 (Original): The region data generating apparatus according to claim 8, wherein said describing circuit describes related information related to the object or information indicating a method of accessing to the related information.

Claim 15 (Currently Amended): A storing medium storing a computer program for describing, over a plurality of frames, region data about a region of an arbitrary object existing in a video, the computer program comprising:

a first program code of extracting position data of a representative point of <u>one of predetermined</u> ~~an~~ approximate ~~figure~~ <u>figures</u> approximating the region ~~or a characteristic point of the region~~ from the plurality of frames;

a second program code of approximating a temporal trajectory of corresponding representative points ~~or corresponding characteristic points~~ of successive frames with <u>one of predetermined functions</u> ~~a function~~ of time, ~~a coefficient of the function being represented by a parameter~~; and

a third program code of describing <u>a first identifier indicating a figure type of the one of the predetermined approximate figures and a second identifier indicating a type of the one of the predetermined functions as the region data</u> ~~the parameter of the function~~.

Claim 16 (Original): The storing medium according to claim 15, wherein

said third program code describes information specifying a leading frame or a trailing

frame of said plurality of frames.

Claim 17 (Canceled).

Claim 18 (Currently Amended): The storing medium according to claim 16, wherein

said third program code describes information of the number of ~~the~~ approximate

~~figure~~ figures forming the region of an arbitrary object as the region data.

Claim 19 (Previously Presented): The storing medium according to claim 15, wherein

the third program code further describes position data of knots of the trajectory and

information specifying the trajectory and used together with position data of the knots of the

trajectory.

Claim 20 (Currently Amended): The storing medium according to claim 15, wherein

a plurality of the representative points ~~or the characteristic points~~ are included in a

certain frame, and

said third program code describes information specifying correspondence among a

plurality of said representative points ~~or characteristic points~~ in the certain frame and a

plurality of said representative points ~~or characteristic points~~ in an adjacent frame.

Claim 21 (Original): The storing medium according to claim 15, wherein

said third program code describes related information related to the object or

information indicating a method of accessing to the related information.

Claim 22 (Currently Amended): The storing medium according to claim 15, wherein

the region data comprises identification information of the object, information

specifying a leading frame and a trailing frame of said plurality of frames, information related

to the object, information indicating a method of accessing to the related information,

information of the number of the <u>predetermined</u> approximate ~~figure~~ <u>figures</u>, and approximate

figure information which includes information of the type of the <u>predetermined</u> approximate

~~figure~~ <u>figures</u>, number information of the representative ~~point~~ <u>points</u>, and function data of a

spline function approximating the trajectories of the representative ~~point~~ <u>points</u> which

includes knot information, order information of the spline function, and coefficient

information of the spline function.

Claim 23 (Original): The storing medium according to claim 15, wherein

the region data comprises identification information of the object, information

specifying a leading frame and a trailing frame of said plurality of frames, related information

related to the object, information indicating a method of accessing to the related information,

and characteristic point information which includes information of the number of the

characteristic point and function data of a spline function approximating the trajectories of

the characteristic point which includes knot information, order information of the spline

function, and coefficient information of the spline function.

Claim 24 (Currently Amended): A region data describing method for describing, over a plurality of frames, region data about a region of an arbitrary object existing in a video, the region data describing method comprising:

extracting position data of a representative ~~point~~ points of an approximate figure approximating the region or a characteristic ~~point~~ points of the region from the plurality of frames;

approximating ~~a trajectory~~ trajectories of corresponding representative points or corresponding characteristic points of ~~at least three~~ successive frames with spline functions including knots, the trajectories of respective points between knots being approximated respective functions ~~a function, the function being represented by a parameter~~; and

describing ~~the parameter of the function~~ information indicating the trajectories for respective points and respective time periods between knots as the region data.

Claim 25 (Canceled).

Claim 26 (Previously Presented): The region data describing method according to claim ~~25~~ 24, further comprising describing information of the type of the approximate figure as the region data.

Claim 27 (Currently Amended): The region data describing method according to claim ~~25~~ 24, further comprising describing information of the number of ~~the~~ approximate ~~figure~~ figures forming the region of an arbitrary object as the region data.

Claim 28 (Currently Amended): The region data describing method according to claim 24, further comprising:

describing position data of the knots of the ~~trajectory~~ respective functions and

information specifying the trajectory used together with position data of the knots ~~of the~~

~~trajectory~~.

Claim 29 (Previously Presented): The region data describing method according to

claim 24, wherein

a plurality of the representative points or the characteristic points are included in a

certain frame, and

the region data includes information specifying correspondence among a plurality of

said representative points or characteristic points in the certain frame and a plurality of said

representative points or characteristic points in an adjacent frame.

Claim 30 (Previously Presented): The region data describing method according to

claim 24, further comprising describing related information related to the object or

information indicating a method of accessing to the related information.

Claim 31 (Currently Amended): A region data generating apparatus for generating

region data about a region of an arbitrary object existing in a plurality of frames of a video,

the region data generating apparatus comprising:

an extracting circuit configured to extract position data of ~~a~~ representative ~~point~~ points

of an approximate figure approximating the region or ~~a~~ characteristic ~~point~~ points of the

region from the plurality of frames;

an approximating circuit configured to approximate ~~a trajectory~~ trajectories of

corresponding representative points or corresponding characteristic points of ~~at least three~~

successive frames with spline functions including knots, the trajectories of respective points

between knots being approximated respective functions ~~a function, the function being~~

~~represented by a parameter~~; and

a describing circuit configured to describe ~~the parameter of the function~~ information

indicating the trajectories for respective points and respective time periods between knots as

the region data.

Claim 32 (Canceled).

Claim 33 (Currently Amended): The region data generating apparatus according to

claim ~~32~~ 31, wherein said describing circuit describes information of the type of the

approximate figure as the region data.

Claim 34 (Currently Amended): The region data generating apparatus according to

claim ~~32~~ 31, wherein said describing circuit describes information of the number of ~~the~~

approximate ~~figure~~ figures forming the region of an arbitrary object as the region data.

Claim 35 (Currently Amended): The region data generating apparatus according to

claim ~~32~~ 31, wherein the describing circuit further describes position data of the knots of the

~~trajectory~~ function and information specifying the trajectory ~~and~~ used together with position

data of the knots ~~of the trajectory~~.

Claim 36 (Previously Presented): The region data generating apparatus according to

claim 31, wherein

a plurality of the representative points or the characteristic points are included in a

certain frame, and

the region data includes information specifying correspondence among a plurality of

said representative points or characteristic points in the certain frame and a plurality of said

representative points or characteristic points in an adjacent frame.

Claim 37 (Previously Presented): The region data generating apparatus according to

claim 31, wherein said describing circuit describes related information related to the object or

information indicating a method of accessing to the related information.

Claim 38 (Currently Amended): A storing medium storing a computer program for

describing, over a plurality of frames, region data about a region of an arbitrary object

existing in a video, the computer program comprising:

a first program code of extracting position data of a representative ~~point~~ points of an

approximate figure approximating the region or a characteristic ~~point~~ points of the region

from the plurality of frames;

a second program code of approximating ~~a trajectory~~ trajectories of corresponding

representative points or corresponding characteristic points of ~~at least three~~ successive frames

with spline functions including knots, the trajectories of respective points between knots

being approximated respective functions ~~a function, the function being represented by a~~

~~parameter~~; and

a third program code of describing ~~the parameter of the function~~ information

indicating the trajectories for respective points and respective time periods between knots as

the region data.

Claim 39 (Canceled).

Claim 40 (Previously Presented): The storing medium according to claim ~~39~~ 38,
wherein

said third program code describes information of the type of the approximate figure.

Claim 41 (Currently Amended): The storing medium according to claim ~~39~~ 38,
wherein

said third program code describes information of the number of ~~the~~ approximate
~~figure~~ figures forming the region of an arbitrary object as the region data.

Claim 42 (Currently Amended): The storing medium according to claim ~~39~~ 38,
wherein the third program code further describes position data of the knots of the ~~trajectory~~
function and information specifying the trajectory ~~and~~ used together with position data of the
knots ~~of the trajectory~~.

Claim 43 (Previously Presented): The storing medium according to claim ~~39~~ 38,
wherein

a plurality of the representative points or the characteristic points are included in a
certain frame, and

said third program code describes information specifying correspondence among a
plurality of said representative points or characteristic points in the certain frame and a
plurality of said representative points or characteristic points in an adjacent frame.

Claim 44 (Previously Presented): The storing medium according to claim ~~39~~ 38,
wherein

said third program code describes related information related to the object or information indicating a method of accessing to the related information.

Claim 45 (Currently Amended): The storing medium according to claim 38, wherein the region data comprises identification information of the object, information specifying a leading frame and a trailing frame of said plurality of frames, information related to the object, information indicating a method of accessing to the related information, information of the number of the approximate figure, and approximate figure information which includes information of the type of the approximate figure, number information of the representative ~~point~~ points, and function data of a spline function approximating the trajectories of the representative ~~point~~ points which includes knot information, order information of the spline function, and coefficient information of the spline function.

Claim 46 (Previously Presented): The storing medium according to claim 38, wherein the region data comprises identification information of the object, information specifying a leading frame and a trailing frame of said plurality of frames, related information related to the object, information indicating a method of accessing to the related information, and characteristic point information which includes information of the number of the characteristic point and function data of a spline function approximating the trajectories of the characteristic point which includes knot information, order information of the spline function, and coefficient information of the spline function.

Claim 47 (New): The method according to claim 1, wherein the describing comprises describing information indicating whether or not the function is predetermined and information indicating an order of the function.

13

Claim 48 (New): The apparatus according to claim 8, wherein the describing circuit describes information indicating whether or not the function is predetermined and information indicating an order of the function.

Claim 49 (New): The storing medium according to claim 15, wherein the third program code describes information indicating whether or not the function is predetermined and information indicating an order of the function.